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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,548	09/15/2000	Nobuyuki Kita	019519-267	1924

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EXAMINER

GILLIAM, BARBARA LEE

ART UNIT PAPER NUMBER

1752

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/662,548

Applicant(s)

KITA ET AL.

Examiner

Barbara Gilliam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16/14/6 is/are rejected.
- 7) ☒ Claim(s) 15, 16/14/8, 16/14/9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 25, 2003 has been entered.

Claims

2. The amendment filed July 25, 2003 has been considered.
3. Claims 6-16 are pending. Claims 1-5 were canceled.
4. The notation x/y has been used to identify the multiple dependent claims. For example 13/6 represents claim 13 as dependent on claim 6.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 6, 10, 12, 13/6, 14/6, 16/14/6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in

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the original disclosure of a substrate having an ink-receptive surface having a light-to-heat conversion function as required in the claims indicated above.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 9 rejected under 35 U.S.C. 102(e) as being anticipated by Vermeersch et al.

a. In US Patent No. 6,210,857, Vermeersch et al. claim a heat-sensitive imaging element for providing a lithographic printing plate, comprising a lithographic base with a hydrophobic oleophilic surface and a top layer comprising a compound capable of converting light into heat and a hydrophilic polymer, characterized in that the hydrophilic polymer is crosslinked (claim 1). The top layer comprises colloidal silica (claim 7), which may be in the form of any commercially available water-dispersion of colloidal silica (column 5, lines 6-22). The colloidal silica meets the present limitations for the colloidal sol (colloid in solution) because it can be any commercially available water-dispersion of colloidal silica. As hydrophilic binder, there may be used homopolymers and copolymers of vinyl alcohol, acrylamide, methylol acrylamide, methylol methacrylamide, acrylic acid, methacrylic acid, hydroxyethyl acrylate, hydroxyethyl methacrylate or maleic anhydride/vinylmethylether copolymers (column

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4, lines 55-65). In Example 1, 13-wt% of the solid content of the coating solution is hydrophilic binder.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 7, 12/7, 14/9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeersch et al. in view of Gardner et al.

a. As indicated in the corresponding rejection under 35 USC 102(e), Vermeersch et al. (6,210,857) claim a heat-sensitive imaging element for providing a lithographic printing plate, comprising a lithographic base with a hydrophobic oleophilic surface and a top layer comprising a compound capable of converting light into heat and a hydrophilic polymer, characterized in that the hydrophilic polymer is crosslinked (claim 1). The top layer comprises colloidal silica (claim 7), which may be in the form of any commercially available water-dispersion of colloidal silica (column 5, lines 6-22). The colloidal silica meets the present limitations for the colloidal sol (colloid in solution) because it can be any commercially available water-dispersion of colloidal silica. As hydrophilic binder, there may be used homopolymers and copolymers of vinyl alcohol, acrylamide, methylol acrylamide, methylol methacrylamide, acrylic acid, methacrylic acid, hydroxyethyl acrylate, hydroxyethyl

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methacrylate or maleic anhydride/vinylmethylether copolymers (column 4, lines 55-65).

In Example 1, 13-wt% of the solid content of the coating solution is hydrophilic binder.

b. Vermeersch et al. do not teach a protective cover layer however it would have been obvious to incorporate a protective cover layer based on the teachings of Gardner, Jr. et al. In US Patent No. 5,939,237, Gardner, Jr. et al. teach a no-process printing plate forming photosensitive article having a protective top coat layer. The protective top layer may provide the no-process printing plate with protection from contamination during handling, improved suppression of odors during imaging and improved roll-up performance on press. The hydrophilic protective top coat layer is removed on press by action of the fountain solution and/or ink (abstract & column 8, lines 6 – 60).

c. Therefore it would have been *prima facie* obvious to one of ordinary skill in the art to coat the imaging element of Vermeersch et al. with a protective cover layer to protect the imaging element from contamination during handling based on the teachings of Gardner, Jr. et al. wherein the imaging element comprises a lithographic base with a hydrophobic oleophilic surface and a top layer comprising a compound capable of converting light into heat and a crosslinked hydrophilic polymer.

11. Claims 8, 11, 12/8, 13/7, 13/9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeersch et al. in view of Teng.

a. As indicated in the corresponding rejections, Vermeersch et al. (6,210,857) claim a heat-sensitive imaging element for providing a lithographic printing plate, comprising a lithographic base with a hydrophobic oleophilic surface and a top layer

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comprising a compound capable of converting light into heat and a hydrophilic polymer, characterized in that the hydrophilic polymer is crosslinked (claim 1). Vermeersch et al. do not teach using a substrate that has been treated for adhesion purposes. It would have been obvious to subject the substrate of Vermeersch et al. to conventional techniques known to improve adhesion between the substrate and top layer such as mechanical graining or brushing, chemical etching and/or AC electrochemical graining as taught by Teng (US 6,014,929; column 10, lines 38-58).

12. Claim 14/8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeersch et al. in view of Teng as applied to claims 8, 11, 12/8, 13/7, 13/9 above, and further in view of Gardner, Jr. et al.

b. Again, Vermeersch et al. do not teach a protective cover layer however it would have been obvious to incorporate a protective cover layer based on the teachings of Gardner, Jr. et al. In US Patent No. 5,939,237, Gardner, Jr. et al. teach a no-process printing plate forming photosensitive article having a protective top coat layer. The protective top layer may provide the no-process printing plate with protection from contamination during handling, improved suppression of odors during imaging and improved roll-up performance on press. The hydrophilic protective top coat layer is removed on press by action of the fountain solution and/or ink (abstract & column 8, lines 6 – 60).

c. Therefore it would have been *prima facie* obvious to one of ordinary skill in the art to coat the imaging element of Vermeersch et al. with a protective cover layer to protect the imaging element from contamination during handling based on the

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teachings of Gardner, Jr. et al. wherein the imaging element comprises a surface treated lithographic base with a hydrophobic oleophilic surface and a top layer comprising a compound capable of converting light into heat and a crosslinked hydrophilic polymer.

Allowable Subject Matter

13. Claims 15, 16/14/8, 16/14/9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter:

a. There is no teaching or suggestion in Vermeersch et al., Gardner, Jr. et al. or Teng that would motivate one of ordinary skill in the art to add a light to heat conversion layer in the hydrophilic protective layer as required in the present claims.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Gilliam whose telephone number is 703-305-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on 703-308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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b. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Barbara Gilliam

Barbara Gilliam
Examiner
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